

Covid-19 Evidence Update

Summarized and appraised resources

29/11/2021

The following resources are available via electronically or in print. Please follow links to access full text online, or contact the library if you have any difficulties with the links.

The resources included in this update are summaries or critically appraised articles. If you would like a more specific search conducted please email kgh-tr.library.service@nhs.net

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Royal College/Society Guidance and Point of Care Tools

Latest information and guidance

<p>NICE</p> <p>COVID-19 rapid guideline: managing COVID-19 (NG191) Last updated 22/11/2021. On 22 November, we added a new recommendation on ivermectin.</p> <p>COVID-19 rapid guideline: managing the long-term effects of COVID-19. Last updated 11th Nov 2021</p> <p>Rapid guidelines and evidence summaries</p> <p>Speciality guides <i>(NHS England and NHS Improvement advice has moved here)</i></p>	
Royal College of Emergency Medicine Covid-19 resources	Association for Palliative Medicine Covid 19 and Palliative, End of Life and Bereavement Care
Royal College of General Practitioners COVID-19	Royal College of Obstetrics & Gynaecologists Coronavirus (COVID-19), pregnancy and women’s health
Royal College of Paediatrics and Child Health Key topics COVID 19	Royal College of Pathologists COVID-19 Resources Hub
Royal College of Psychiatrists COVID-19: Community mental health settings	Royal College of Surgeons COVID 19 Information Hub
Royal Pharmaceutical Society COVID-19	British Society of Echocardiography COVID-19 clinical guidance
British Society of Gastroenterology COVID 19 updates	British Society for Haematology COVID-19 Updates

British Society for Rheumatology COVID-19 updates for members	Combined Intensive Care Society, Association of Anaesthetists, Royal College of Anaesthetists, Faculty of Intensive Care Medicine guidance Clinical Guidance
BMJ Best Practice Coronavirus disease 2019 (COVID-19) Management of coexisting conditions in the context of COVID-19	DynaMed Covid 19 (Novel Coronavirus) Covid-19 and Pediatric Patients Covid 19 and Special Populations Covid-19 and Patients with Cancer Covid-19 and Cardiovascular Disease Patients Covid-19 and Patients with Chronic Kidney Disease and End-stage renal Disease Covid-19 and Pregnant Patients Covid-19-associated Coagulopathy
Don't forget the bubbles An evidence summary of paediatric Covid-19 literature Covid-19 – a selection of evidence based summaries and articles.	

New Guidance, Reports and selected systematic reviews (for links to NICE Guidance see table above)

[COVID-19: enhanced surveillance of cases in vaccinated individuals.](#)

UK Health Security Agency (UKHSA); 2021.

<https://www.gov.uk/government/publications/covid-19-enhanced-surveillance-of-cases-in-vaccinated-individuals/>

[Information on the enhanced surveillance of coronavirus (COVID-19) cases in vaccinated individuals. Clinicians are requested to report any confirmed cases and submit samples for partially or fully vaccinated individuals that meet the case definition.]

Freely available online

[National protocol for COVID-19 mRNA vaccine BNT162b2 \(Pfizer/BioNTech\).](#)

UK Health Security Agency (UKHSA); 2021.

<https://www.gov.uk/government/publications/national-protocol-for-covid-19-mrna-vaccine-bnt162b2-pfizerbiontech/>

[This protocol is for the administration of COVID-19 mRNA vaccine BNT162b2 to individuals in accordance with the national COVID-19 vaccination programme.]

Freely available online

[Ultrasound gel: good infection prevention practice.](#)

UK Health Security Agency (UKHSA); 2021.

<https://www.gov.uk/government/publications/ultrasound-gel-good-infection-prevention-practice/>

[Guidance on the safe use of ultrasound gel to reduce risk of transmission of infection during ultrasound and related procedures.]

Freely available online

[Covid-19 status certification.](#)

House of Commons Library; 2021.

<https://commonslibrary.parliament.uk/research-briefings/cbp-9288/>

[Covid-19 status certification (also referred to as a "vaccine passport") has been proposed as a means of reducing the

risk of transmitting the Covid-19 virus in a number of settings. This briefing explores the Government's policy on certification. It also provides discussion on the scientific evidence and other issues associated with the use of certification.]

Freely available online

[Frequently asked questions: Demonstrating Covid-19 and vaccination status.](#)

House of Commons Library; 2021.

<https://commonslibrary.parliament.uk/research-briefings/cbp-9375/>

[This briefing paper provides answers to frequently asked questions about demonstrating Covid-19 status (otherwise called Covid-19 status certification) and use of the NHS Covid Pass in England.]

Freely available online

[Convalescent plasma for COVID-19: a meta-analysis, trial sequential analysis, and meta-regression.](#)

Snow TAC. *British Journal of Anaesthesia* 2021;127(6):834-844 .

[In patients with COVID-19, there was no clear mortality benefit associated with convalescent plasma treatment. In patients with mild disease, convalescent plasma did not prevent either the need for mechanical ventilation or ICU admission.]

Freely available online

[Effectiveness of public health measures in reducing the incidence of covid-19, SARS-CoV-2 transmission, and covid-19 mortality: systematic review and meta-analysis.](#)

Talic S. *BMJ* 2021;375:e068302.

[This systematic review and meta-analysis suggests that several personal protective and social measures, including handwashing, mask wearing, and physical distancing are associated with reductions in the incidence covid-19. Public health efforts to implement public health measures should consider community health and sociocultural needs, and future research is needed to better understand the effectiveness of public health measures in the context of covid-19 vaccination.]

[Efficacy and Safety of Immunomodulators in Patients with COVID-19: A Systematic Review and Network Meta-Analysis of Randomized Controlled Trials.](#)

Ngamprasertchai T. *Infectious Diseases and Therapy* 2021;;doi.org/10.1007/s40121-021-00545-0.

[Overall, immunomodulators were more effective than standard of care. Important differences exist among immunomodulators regarding both efficacy and safety in favor of ruxolitinib and baricitinib. Further well-conducted randomized controlled trials should focus on JAK inhibitors. Methylprednisolone use should be discouraged because of its poor efficacy and high risk of superimposed infection.]

Freely available online

Omicron Variant

WHO: Tracking SARS-CoV-2 variants.

[https://www.who.int/news/item/26-11-2021-classification-of-omicron-\(b.1.1.529\)-sars-cov-2-variant-of-concern](https://www.who.int/news/item/26-11-2021-classification-of-omicron-(b.1.1.529)-sars-cov-2-variant-of-concern)

Designated variant of concern on 26th Nov.

European Centre for Disease Prevention and Control. Threat assessment brief: implications of the emergence and spread of the SARS-CoV-2 B.1.1.529 variant of concern (Omicron) for the EU/EEA

<https://www.ecdc.europa.eu/en/publications-data/threat-assessment-brief-emergence-sars-cov-2-variant-b.1.1.529>

UK Health Security Agency. Covid-19 variants identified in the UK

<https://www.gov.uk/government/news/covid-19-variants-identified-in-the-uk>

Your local epidemiologist

<https://yourlocalepidemiologist.substack.com/p/new-concerning-variant-b11529>

Interesting blog site on the new variant – the new variant can be distinguished on a particular type of PCR test directly.

Imperial College London. Q&A Imperial experts discuss new variant B.1.1.529

<https://www.imperial.ac.uk/news/232217/qa-imperial-experts-discuss-variant-b11529/>

Covid-19 Evidence Alerts from McMaster Plus

COVID-19 Evidence Alerts to current best evidence for clinical care of people with threatened, suspected or confirmed COVID-19 infection. Reports are critically appraised for scientific merit, and those with acceptable scientific merit are appraised for relevance and importance by frontline clinicians. The studies listed below meet their criteria for quality. The site also lists other studies published which do not meet their criteria, or do not belong to a study category they appraise. ([More information available](#)).

Diagnosis
Prospective evaluation of ID NOW COVID-19 assay used as point-of-care test in an emergency department. <i>NguyenVan JC, Gerlier C, Pilmis B, et al. J Clin Virol</i>
Evaluation of the diagnostic accuracy of COVID-19 antigen tests: A systematic review and meta-analysis. <i>Wang YH, Wu CC, Bai CH, et al. J Chin Med Assoc</i>
Systematic review with meta-analysis of diagnostic test accuracy for COVID-19 by mass spectrometry. <i>Spick M, Lewis HM, Wilde MJ, et al. Metabolism</i>
Clinical Prediction Guide
Comparison of mortality risk evaluation tools efficacy in critically ill COVID-19 patients. <i>Vicka V, Januskeviciute E, Miskinyte S, et al. BMC Infect Dis</i>
P-POSSUM as mortality predictor in COVID-19-infected patients submitted to emergency digestive surgery. A retrospective cohort study. <i>Madrazo Gonzalez Z, Osorio Aguilar J, Videla Ces S, et al. Int J Surg</i>
Relationship of platelet counts, platelet volumes, and Curb-65 scores in the prognosis of COVID-19 patients. <i>Isler Y, Kaya H Am J Emerg Med</i>

<p>Comparison of ROX and HACOR scales to predict high-flow nasal cannula failure in patients with SARS-CoV-2 pneumonia. Valencia CF, Lucero OD, Castro OC, et al. Sci Rep</p>
<p>Validated tool for early prediction of intensive care unit admission in COVID-19 patients. Huang HF, Liu Y, Li JX, et al. World J Clin Cases</p>
<p>External validation of the QCovid risk prediction algorithm for risk of COVID-19 hospitalisation and mortality in adults: national validation cohort study in Scotland. Simpson CR, Robertson C, Kerr S, et al. Thorax</p>
<p>Performance of a machine-learning algorithm to predict hypotension in mechanically ventilated patients with COVID-19 admitted to the intensive care unit: a cohort study. van der Ven WH, Terwindt LE, Risvanoglu N, et al. J Clin Monit Comput</p>
<p>Development and validation of a prognostic model for early triage of patients diagnosed with COVID-19. An C, Oh HC, Chang JH, et al. Sci Rep</p>
<p>Etiology</p>
<p>Long-term use of immunosuppressive medicines and in-hospital COVID-19 outcomes: a retrospective cohort study using data from the National COVID Cohort Collaborative. Andersen KM, Bates BA, Rashidi ES, et al. Lancet Rheumatol</p>
<p>Primary Prevention</p>
<p>Systematic review of the safety, immunogenicity, and effectiveness of COVID-19 vaccines in pregnant and lactating individuals and their infants. Fu W, Sivajohan B, McClymont E, et al. Int J Gynaecol Obstet</p>
<p>Safety and immunogenicity of concomitant administration of COVID-19 vaccines (ChAdOx1 or BNT162b2) with seasonal influenza vaccines in adults in the UK (ComFluCOV): a multicentre, randomised, controlled, phase 4 trial. Lazarus R, Baos S, Cappel-Porter H, et al. Lancet</p>
<p>N95 respirator and surgical mask effectiveness against respiratory viral illnesses in the healthcare setting: A systematic review and meta-analysis. Collins AP, Service BC, Gupta S, et al. J Am Coll Emerg Physicians Open</p>
<p>Evaluation of the BNT162b2 Covid-19 Vaccine in Children 5 to 11 Years of Age. Walter EB, Talaat KR, Sabharwal C, et al. N Engl J Med</p>
<p>Prognosis</p>
<p>Treatment</p>
<p>Efficacy of Inhaled Ciclesonide for Outpatient Treatment of Adolescents and Adults With Symptomatic COVID-19: A Randomized Clinical Trial. Clemency BM, Varughese R, Gonzalez-Rojas Y, et al. JAMA Intern Med</p>
<p>Treatment of COVID-19 in pregnant women: A systematic review and meta-analysis. Giesbers S, Goh E, Kew T, et al. Eur J Obstet Gynecol Reprod Biol</p>
<p>Aspirin in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial. Lancet</p>
<p>Association between convalescent plasma treatment and mortality in COVID-19: a collaborative systematic review and meta-analysis of randomized clinical trials. Axfors C, Janiaud P, Schmitt AM, et al. BMC Infect Dis</p>
<p>Intravenous immunoglobulins in patients with COVID-19-associated moderate-to-severe acute respiratory distress syndrome (ICAR): multicentre, double-blind, placebo-controlled, phase 3 trial. Mazeraud A, Jamme M, Mancusi RL, et al. Lancet Respir Med</p>
<p>Colchicine Is Safe Though Ineffective in the Treatment of Severe COVID-19: a Randomized Clinical Trial (COLCHIVID). Absalon-Aguilar A, Rull-Gabayet M, Perez-Fragoso A, et al. J Gen Intern Med</p>
<p>Vitamin C and COVID-19 treatment: A systematic review and meta-analysis of randomized controlled trials. Rawat D, Roy A, Maitra S, et al. Diabetes Metab Syndr</p>

<p>The Use of Tocilizumab in Patients with COVID-19: A Systematic Review, Meta-Analysis and Trial Sequential Analysis of Randomized Controlled Studies. Maraolo AE, Crispo A, Piezzo M, et al. J Clin Med</p>
<p>The effects of aspirin on the outcome of COVID-19: A systematic review and meta-analysis. Wijaya I, Andhika R, Huang I, et al. Clin Epidemiol Glob Health</p>
<p>Prone positioning for non-intubated spontaneously breathing patients with acute hypoxaemic respiratory failure: a systematic review and meta-analysis. Fazzini B, Page A, Pearse R, et al. Br J Anaesth</p>
<p>Non-invasive respiratory support in the management of acute COVID-19 pneumonia: considerations for clinical practice and priorities for research. Weerakkody S, Arina P, Glenister J, et al. Lancet Respir Med</p>
<p>Role of Short-Term Estradiol Supplementation in Symptomatic Postmenopausal COVID-19 Females: A Randomized Controlled Trial. Seth S, Sharma R, Mishra P, et al. J Midlife Health</p>
<p>The Saudi Critical Care Society practice guidelines on the management of COVID-19 in the ICU: Therapy section. Alhazzani W, Alshahrani M, Alshamsi F, et al. J Infect Public Health</p>
<p>COVID-19 treatment in children: A systematic review and meta-analysis. Panda PK, Sharawat IK, Natarajan V, et al. J Family Med Prim Care</p>
<p>Effect of anti-interleukin drugs in patients with COVID-19 and signs of cytokine release syndrome (COVID-19): a factorial, randomised, controlled trial. Declercq J, Van Damme KFA, De Leeuw E, et al. Lancet Respir Med</p>
<p>Efficacy and Safety of Immunomodulators in Patients with COVID-19: A Systematic Review and Network Meta-Analysis of Randomized Controlled Trials. Ngamprasertchai T, Kajeekul R, Sivakorn C, et al. Infect Dis Ther</p>
<p>Association of proton pump inhibitor use with adverse health outcomes: A systematic umbrella review of meta-analyses of cohort studies and randomised controlled trials. K Veettil S, Sadoyu S, Mary Bald E, et al. Br J Clin Pharmacol</p>
<p>Rehabilitation and COVID-19: rapid living systematic review by Cochrane Rehabilitation Field - third edition. Update as of June 30th, 2021. Ceravolo MG, Andrenelli E, Arienti C, et al. Eur J Phys Rehabil Med</p>
<p>Efficacy of the early treatment with tocilizumab-hydroxychloroquine and tocilizumab-remdesivir in severe COVID-19 Patients. Sarhan RM, Harb HS, Abou Warda AE, et al. J Infect Public Health</p>
<p>Stem cell-based therapy for COVID-19 and ARDS: a systematic review. Zanirati G, Provenzi L, Libermann LL, et al. NPJ Regen Med</p>
<p>Effect of famotidine on hospitalized patients with COVID-19: A systematic review and meta-analysis. Chiu L, Shen M, Lo CH, et al. PLoS One</p>
<p>The role of vitamin D in prevention OF COVID-19 and its severity: an umbrella review. Margarucci LM, Enrico M, Glanfranceschi G, et al. Acta Biomed</p>

Cochrane Systematic Reviews

[Cochrane Evidence on COVID-19: a roundup](#)

No new reviews published since the last bulletin.

Evidence Aid

<https://evidenceaid.org/evidence/coronavirus-covid-19/>

This evidence collection contains plain-language summaries of high-quality research which are available in English, and translated into French, Spanish, Portuguese, Arabic and Chinese (simplified and traditional).

The collection includes summaries of systematic reviews that might be relevant to the direct impact of COVID-19 (including reviews of emerging research, as well as existing reviews of relevant interventions) on health and other outcomes, the impact of the COVID-19 response on other conditions, and issues to consider for the recovery period after COVID-19.

[Early psychological interventions for frontline responders in disaster settings \(research up to July 2020\)](#)

Citation: Hooper JJ, Saulsman L, Hall T, et al. *Addressing the psychological impact of COVID-19 on healthcare workers: learning from a systematic review of early interventions for frontline responders*. BMJ Open. 2021;11(5):e044134.

Language: Abstract and full text only available in EN.

Free to view: Yes.

Funding sources: RTP scholarship from the University of Western Australia.

What is this? The COVID-19 pandemic and other emergencies and disasters places a strain on the physical and mental health of healthcare workers and frontline responders. Effective interventions to alleviate this would help improve the resilience of health systems.

In this systematic review, the authors searched for studies of early psychological interventions (within 3 months of a traumatic event) for frontline responders in disaster settings. They restricted their searches to articles published in English within the last 15 years and did the search in July 2020. They included 4 cross-sectional studies, 3 individually randomised trials, 2 cluster randomised trials and 3 quasi-experimental studies.

What was found: Psychological first aid, eye movement desensitisation and reprocessing, and trauma risk management were effective for frontline responders, in at least two included studies.

The effects of Trauma Risk Management (TRiM) for frontline responders are uncertain.

Implications: The authors of this review concluded that service providers should implement and evaluate early psychological interventions in frontline workers in order to refine best practices for managing the psychological impact of disasters.

Other considerations: The authors of the review did not discuss their findings in the context of issues relating to health equity.

[Interventions to support resilience and mental health of frontline health and social care professionals during disease outbreaks and pandemics \(research up to 28 May 2020\)](#)

Citation: Pollock A, Campbell P, Cheyne J, et al. *Interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemic: a mixed methods systematic review*. Cochrane Database of Systematic Reviews. 2020;(11):CD013799.

Language: Abstract available in EN / ES / FA / FR. Plain language summary available in DE / EN / ES / FA/ FR / JA / MS / PL / RU / ZH. Audio podcast available in EN / ES. Full text available in EN.

Free to view: Yes.

Funding sources: Scottish Government's Chief Scientist Office (CSO), UK.

What is this? Disease outbreaks place a strain on the mental health of healthcare workers. Effective interventions to alleviate this would help improve the resilience of health systems.

In this Cochrane rapid review, the authors searched for studies related to interventions aimed at supporting the resilience and mental health of frontline healthcare and social care workers. They restricted their searches to articles published between 2002 and 28 May 2020 but did not restrict their searches by language. They included 16 studies related to professionals who had worked during outbreaks of SARS (2 studies), Ebola (9), MERS (1) and COVID-19 (4). They also identified 32 studies that are awaiting classification. Audio podcasts for this review are available here[<https://www.cochrane.org/podcasts/10.1002/14651858.CD013779>].

What was found: At the time of this review, the included studies showed that the certainty of evidence for interventions to improve the mental health of frontline workers was very low, with very low certainty about whether training frontline healthcare workers to deliver psychological first aid influenced burnout.

Two primary barriers to intervention implementation were: (1) frontline workers themselves or the organization they work in and (2) a lack of equipment, staff time or skills needed for intervention.

Three facilitators to intervention implementation were: (1) adapting interventions to local needs, (2) implementing effective communication and (3) building a positive, safe, and supportive learning environment for frontline workers.

Implications: The authors of the review concluded that there was a lack of evidence from studies carried out during or after disease outbreaks, epidemics or pandemics that could inform the selection of interventions that are likely to be beneficial to the resilience and mental health of frontline healthcare and social care workers. They stated that alternative sources of evidence, such as that arising from other healthcare crises, and general evidence relating to the effectiveness of interventions to support mental well-being during stressful situations, should therefore be used to inform decision making and that those selecting interventions aimed at supporting the mental health of frontline health and social care workers, should consider organisational, social, personal and psychological factors.

Other considerations: The authors of the review did not discuss their findings in the context of issues relating to health equity.

[Personal protective equipment for reducing the risk of respiratory infection among healthcare workers involved in emergency trauma surgery \(search on 27 July 2020\)](#)

Citation: Griswold DP, Gempeler A, Kolas A, et al. *Personal protective equipment for reducing the risk of COVID-19 infection among health care workers involved in emergency trauma surgery during the pandemic: An umbrella review*. Journal of Trauma and Acute Care Surgery. 2021;90(4):e72-e80.

Language: Abstract and full text only available in EN.

Free to view: Yes.

Funding sources: National Institute for Health Research Global Health Research Group on Neurotrauma, UK.

What is this? Preventing the transmission of infectious diseases among healthcare workers is important to the building of resilient health systems, especially during epidemics and pandemics. Various types of personal protective equipment (PPE) are used to help achieve this.

In this overview of reviews, the authors searched for systematic reviews of experimental and observational studies (and experimental or observational studies if not included in systematic reviews) with a particular focus on healthcare workers caring for trauma surgery patients. They restricted their searches to articles published in English and Spanish and did the search on 27 July 2020. They included 17 systematic reviews and 1 qualitative evidence synthesis, covering studies from 35 countries. Six of the systematic reviews included outcome data for COVID-19 infection and four evaluated other respiratory pathogens such as seasonal influenza, SARS, H1N1 and MERS.

What was found: Use of N95 respirators and surgical masks is associated with a reduced risk of COVID-19 when compared with no mask use (high certainty evidence).

In moderate- to high-risk environments, N95 respirators are associated with a further reduction in the risk of COVID-19 infection when compared with surgical masks.

Eye protection reduces the risk of infection of healthcare workers caring for trauma surgery patients.

Decontamination of masks and respirators with ultraviolet germicidal irradiation, vaporous hydrogen peroxide or dry heat is effective and does not affect the performance or fit of PPE.

Implications: The authors of this review recommended that, when caring for a trauma patient with suspected or unknown COVID-19 status, healthcare workers should use at least N95 respirators or equivalents and that decontamination with ultraviolet light, hydrogen peroxide and dry heat should be made available.

Other considerations: The authors of the review discussed their findings in the context of place of residence.

[Personal protective equipment for protecting healthcare staff from highly infectious diseases](#)

Citation: Verbeek JH, Rajamaki B, Ijaz S, Sauni R, Toomey E, Blackwood B, Tikka C, Ruotsalainen JH, Balci FS. *Personal protective equipment for preventing highly infectious diseases due to exposure to contaminated body fluids in healthcare staff*. Cochrane Database of Systematic Reviews. 2020;(4):CD011621.

Language: Abstract available in EN / ES / FR / PO / CH. Full text available in EN.

Free to view: Yes.

Funding sources: Internal sources of support: Cochrane Collaboration, UK Bursary; Finnish Institute of Occupational Health; National Institute for Occupational Safety and Health. External sources: None reported.

What is this? A variety of types of personal protective equipment (PPE) are used to try to protect healthcare workers from infection with, for example, the SARS-CoV-2 virus.

In this Cochrane review, the authors searched for studies of the effects of different types of PPE, ways to put it on and remove it and how to train workers to comply with guidance on its use. They did not restrict their searches by date, language or type of publication and did the search in March 2020. They identified 14 randomized, 1 quasi-randomized and 9 non-randomized trials (total: 2278 participants).

What was found: A powered, air-purifying respirators may protect better than a N95 mask and gown but was more difficult to put on.

Long gowns may protect better against contamination than coveralls and were easier to take off; and gowns may protect better against contamination than aprons.

PPE made of more breathable material may lead to a similar number of spots on the trunk compared to more water-repellent material but may have greater user satisfaction.

Other interventions that may reduce contamination include sealed gown and glove combinations; a better fitting gown around the neck, wrists and hands; a better cover of the gown-wrist interface; and tabs to grab to facilitate the removal of masks or gloves; using Centers for Disease Control and Prevention recommendations for removing PPE; one-step removal of gloves and gown; double-gloving compared to single gloving; and spoken instructions and extra sanitation of gloves with quaternary ammonium or bleach when removing PPE.

For training: the use of additional computer simulation, a video lecture on putting PPE on and face-to-face instruction may be better than providing folders or videos only.

Implications: Consistent use of full-body PPE can decrease the risk of infection for healthcare workers.

Other considerations: The authors of the review discussed their findings in the context of Education.

Podcast of this review available [here](#).

[Experiences and perceptions of people in health systems in responding to COVID-19 \(research up to 21 October 2020\)](#)

Citation: Turner S, Botero-Tovar N, Herrera MA, et al. *Systematic review of experiences and perceptions of key actors and organisations at multiple levels within health systems internationally in responding to COVID-19*. Implementation Science. 2021;16(1):50.

Language: Abstract and full text only available in EN.

Free to view: Yes.

Funding sources: Colombian Ministry of Science, Technology and Innovation.

What is this? The COVID-19 pandemic is placing a strain on health systems and healthcare workers which might influence their resilience to crises.

In this systematic review, the authors searched for qualitative studies related to the response of health systems to the COVID-19 pandemic. They restricted their searches to articles published in English and Spanish between 1 October 2019 and 21 October 2020. They included 34 studies, which were from Bangladesh (2 studies), Belgium (1), Brazil (1), China (6), France (1), Italy (4), Iran (2), Israel (1), Jordan (1), Lebanon (1), Malaysia (1), Pakistan (1), Singapore (2), Spain (2), UK (1) and USA (6).

What was found: Healthcare workers had to adapt to new roles and responsibilities during the COVID-19 pandemic. Some experienced physical and psychological stress.

Healthcare workers demonstrated resilience and developed innovative approaches to address the new challenges.

Changes in organisational processes were oriented toward safeguarding the mental health and wellbeing of healthcare workers.

Emergent leadership processes to respond to COVID-19 included interventions to improve care coordination and information sharing within and across different organisational functions.

Local health systems offered continuous training and resources and coordinated the responses of professional bodies and healthcare organisation at the time of the pandemic; reviewing and updating their regulations to support changes in organisation process.

Implications: The authors of the review concluded that future qualitative studies should draw more explicitly on established theoretical frameworks that can be applied critically to the particular context of COVID-19, and then further developed in response to the empirical evidence identified, in order to better understand how health system responses to COVID-19 should be guided.

Other considerations: The authors of the review discussed their findings in the context of occupation.

[Interventions to address mental health issues in healthcare workers during infectious disease outbreaks \(search up to 2 October 2020\)](#)

Citation: Zaçe D, Hoxhaj I, Orfino A, et al. *Interventions to address mental health issues in healthcare workers during infectious disease outbreaks: a systematic review*. Journal of Psychiatric Research. 2021;136:319-33

Language: Abstract and full text only available in EN.

Free to view: Yes.

Funding sources: The authors report that this review did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

What is this? Some healthcare workers are affected by mental health issues during pandemics and epidemics.

In this systematic review, the authors searched for qualitative and quantitative research into interventions intended to address mental health issues of healthcare workers during infectious disease outbreaks. They restricted their searches to articles published in English and conducted the search up to 2 October 2020. They included 24 studies, which had used a variety of study designs.

What was found: Organizational-level interventions (e.g., promoting leadership and teamwork, manpower allocation and adjusting work hours) helped promote mental health wellbeing among healthcare workers.

Providing healthcare workers with sufficient personal protective equipment reduced anxiety and depression levels, improved sleep quality and decreased worries about their own and their families' health.

Clear communication of directives and precautionary measures reduced mental health issues among healthcare workers.

During pandemics and epidemics, psycho-emotional interventions (e.g., psychological education/training, therapy, counselling and cognitive behaviour training) helped build resilience among healthcare workers and reduced stress.

Implications: The authors of the review concluded that the mental health impact on healthcare workers, during epidemics/pandemics and after, is complex and should be addressed in a sustained way by governments and healthcare systems, which should design and implement multi-factorial intervention strategies to mitigate its impact in a collaborative and interdisciplinary manner. They stated that there is a need for further research on the effectiveness of these interventions.

Other considerations: The authors of the review discussed their findings in the context of culture and socioeconomic status.

Dynamed - [COVID-19 \(Novel Coronavirus\)](#)

Latest updates

Guideline Summary Updated 22 Nov 2021

IDSA recommendations for infection prevention for healthcare personnel caring for patients with suspected or known COVID-19 (IDSA 2021 Nov 4) [View in topic](#)

Drug/Device Alert Updated 22 Nov 2021

casirivimab and imdevimab (Ronapreve) authorized by European Commission for prevention of COVID-19 in patients ≥ 12 years old and weighing ≥ 40 kg (European Medicines Agency [EMA] Press Release 2021 Nov 11) [View in topic](#)

Evidence Updated 19 Nov 2021

COVID Watch automated text messaging service may reduce mortality compared to usual care in community-dwelling adults with SARS-CoV-2 infection (Ann Intern Med 2021 Nov 16 early online) [View in topic](#)

Evidence Updated 18 Nov 2021

risk of SARS-CoV-2 infection reported to be 11% for healthcare providers in the United Kingdom between January and October 2020 (PLoS Med 2021 Oct) [View in topic](#)

Evidence Updated 18 Nov 2021

risk of hospital-acquired SARS-CoV-2 infection estimated to be 0.18%-0.58% for patients hospitalized in the United Kingdom between January and October 2020 (PLoS Med 2021 Oct) [View in topic](#)

Evidence Updated 18 Nov 2021

3 doses of Pfizer-BioNTech (BNT162b2) vaccine may improve vaccine effectiveness to prevent death, severe disease, hospitalization, symptomatic disease, and SARS-Cov-2 infection compared to ≥ 5 months after second dose in persons ≥ 16 years old (Lancet 2021 Oct 29 early online) [View in topic](#)

Evidence Updated 18 Nov 2021

hospitalization for COVID-19 in adults associated with decreased likelihood of prior vaccination with 2 doses of mRNA COVID-19 vaccine compared to hospitalization for other reason, and in adults with COVID-19, prior vaccination associated with decreased 28-day mortality and decreased composite of death and need for mechanical ventilation (JAMA 2021 Nov 4 early online) [View in topic](#)

Evidence Updated 17 Nov 2021

life expectancy appears to have fallen in 2020 in most upper-middle- and high-income countries due to COVID-19 pandemic (BMJ 2021 Nov 3) [View in topic](#)

BMJ Best Practice

Coronavirus disease 2019 (COVID-19)

Not updated since last bulletin.

Guidelines recommend measures to manage acute and chronic conditions during the COVID-19 pandemic: updated

Updated 25th Nov 2021

Further guidelines have been published to inform the management of patients with coexisting conditions during the COVID-19 pandemic.

- Considerations for perinatal care (updated)
- Considerations for patients receiving systemic anti-cancer therapy (updated)
- Considerations for the mental health of adults (updated)
- Considerations for patients with cardiac implantable electronic devices (updated)
- Aortic stenosis (updated)
- Cardiopulmonary resuscitation (CPR) (updated)
- Chronic congestive heart failure (updated)
- Crohn's disease (updated)
- Learning disability (updated)
- Essential hypertension (updated)
- Mitral regurgitation (updated)
- Mucormycosis (updated)
- Multiple myeloma (updated)
- Non-ST-elevation myocardial infarction (NSTEMI) (updated)
- Obesity in adults (updated)
- Smoking cessation (updated)
- ST-elevation myocardial infarction (STEMI) (updated)
- Ulcerative colitis (updated)

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